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December 20, 1999

Magalie Roman Salas, Secretary
Federal Communications Commission
The Portals/445 Twelfth Street, S.W.
Washington, D.C. 20054

RECEIVED
DEC 21 1999
FCC MAIL ROOM

RE: Petition for Rulemaking

Dear Ms. Salas:

There is transmitted herewith on behalf of Sierra Broadcasting Company, the licensee of Station KRNVT(TV), Reno, Nevada, an original and four copies of a *Petition for Rulemaking* to institute a rulemaking to amend §73.622(b), the DTV Table of Allocations, by substituting Channel 9 as KRNVT(TV)'s paired DTV allocation for the transition period in lieu of Channel 34 as originally allocated.

An extra copy of this transmittal letter is enclosed, as well as a pre-addressed, stamped envelope. Please confirm your receipt of the filing of this *Petition for Rulemaking* by date stamping the extra copy of this transmittal letter and returning it to the undersigned counsel.

Should additional information be desired concerning this *Petition for Rulemaking* please contact the undersigned counsel.

Respectfully submitted,

SIERRA BROADCASTING COMPANY

By J. Dominic Monahan
J. Dominic Monahan, Its Counsel

JDM/nlk

Enclosures

cc: Ralph Toddre (w/enclosure)
James E. Rogers (w/enclosure)
Frank Haynes (w/enclosure)
Don Markley (w/enclosure)

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**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

RECEIVED

DEC 21 1999

FCC MAIL ROOM

In the Matter of)	
)	
Amendment of Section 73.622(b))	MM Docket No. _____
Table of Allotments,)	RM- _____
Digital Television Broadcast Stations)	
(Reno, Nevada))	

PETITION FOR RULEMAKING

Sierra Broadcasting Company ("Sierra"), the licensee of Station KRNVT(TV), Reno, Nevada, by its attorneys and pursuant to Sections 1.401 and 73.622(a) of the Commission's rules (47 CFR §§ 1.401 and 73.622(a)), hereby respectfully petitions the Commission to institute a rulemaking to amend §73.622(b), the DTV Table of Allocations, by substituting Channel 9 as the station's paired DTV allocation for the transition period in lieu of Channel 34 as originally allocated. The proposed substitution would permit Station KRNVT(TV) to operate with a paired VHF DTV channel.

BACKGROUND STATEMENT

KRNVT(TV) is licensed to and serves the Reno, Nevada DMA which is ranked 108th in the nation. Not only is the Reno DMA a small market, but it suffers the most severe coverage problems of any market in the nation because of severe terrain shielding which

results in shadowing and multi-pathing. Currently as an NTSC operation on Channel 4, Station KRNV achieves a predicted coverage to some 393,000 persons residing in some 18,649 square miles. If KRNV were to operate from its current transmitter site using DTV Channel 34, its coverage would be reduced to some 331,000 persons in an area of 11,905 square miles. However, by operating on Channel 9 from its proposed location on Slide Mountain¹ and based on the Longley-Rice prediction method. Station KRNV would provide coverage to some 420,619 people, an increase of some 37% over the proposed coverage which would result from operating on Channel 34.

The Commission has adopted a number of rules and policies to assist the smaller market stations in recognition of the special burden that implementation of digital television placed on them, including staggered construction schedules (*see* ¶78, *Advanced Television Systems and Their Impact Upon Existing Television Broadcast Service, Fifth Report and Order*, MM Docket 87-268, 12 FCC Rcd 12809 (1997)). At the same time the Commission has also promised to provide broadcasters with flexibility in developing alternate allotment proposals.

In this instance a grant of the instant rulemaking will not only allow Station KRNV(TV) to improve its replication of its existing NTSC signal on Channel 4, but it will reduce the cost of operating its DTV station by transmitting on a VHF DTV channel instead

¹On October 29, 1999, Station KRNV tendered for filing its application for DTV operation on Channel 34, proposing to operate from a site on Slide Mountain instead of its existing NTSC operation on Channel 4 from Red Peak (*see* BPCDT-19991029AEE).

of a UHF channel. This factor and the improved coverage and efficiency from its proposal to operate from Slide Mountain, Nevada clearly provides more than sufficient public interest justification.

The attached engineering exhibit demonstrates that KRNVT's proposed service area will encompass the entire community of license as required under the rules that the proposed amendment will conform with the Commission's *de minimis* interference standards set forth in §73.623(c)(2).

In view of the above, Sierra respectfully requests the Commission to initiate a rulemaking proceeding to amend §73.622(b) of its rules to substitute Channel 9 for Channel 34 for use by KRNVT-DTV at the transmitter site specified in Sierra's pending application for DTV operation on Slide Mountain.

Respectfully submitted,

SIERRA BROADCASTING COMPANY

By 
J. Dominic Monahan, Its Counsel

PETITION FOR RULEMAKING

The following engineering statement and attached exhibits have been prepared for Sierra Broadcasting Company, licensee of Television Broadcast Station KRNV at Reno, Nevada, and are in support of their Petition to modify Section 73.622, Digital Television Table of Allotments, of the Commission's Rules and Regulations.

The Petitioner requests that Section 73.622 be changed in the following manner:

<u>City</u>	<u>Existing</u>	<u>Proposed</u>
Reno, NV.	*15, 22c, 23, 26, 32, 34, 44	9c, *15, 22c, 23, 26, 32, 44

In the existing Table of Allotments, Channel 34 is paired with KRNV which is operating on channel 4. It is respectfully submitted that the allotment of channel 34 resulted in one of the poorest percentage matches between the ATV and NTSC operation of any allocation in that table. The change proposed by the Petitioner would correct that significant imbalance. In addition, an application is currently pending before the Commission to move the NTSC operation on channel 4 to the same location proposed in this Petition for the DTV operation.

- 2 -

The Petitioner, in cooperation with other television station operators in the Reno, Nevada area, is cooperating with the U.S. Forest Service in the development of a new electronic site on Slide Mountain which is located to the Southwest of the city of Reno. That site will permit a significantly improved service to the city of Reno as well as to Carson City and other areas South of Reno which are experiencing a significant and rapid population increase. At the same time, the move of the site to Slide Mountain will greatly improve service into the Lake Tahoe area which lies to the West of Slide Mountain.

It is requested that the allocation of channel 9 to Reno, Nevada for use by KRNV be assigned an effective radiated power of 16.8 KW. and that the antenna pattern associated with that allocation be as shown on the first of the attached exhibits. It has been determined that antennas are readily available which would not exceed that antenna pattern at any azimuth value. All calculations of interference to other stations were performed using that antenna pattern.

The value of 16.8 KW. was determined as being the maximum value of power which can be utilized by a

- 3 -

station operating on channel 9 in Zone II with its center of radiation at 856.5 meters above average terrain. That value has been determined as being an obtainable value on the tower which is proposed for the new electronic site. The coordinates for the proposed allocation would be 39° 18' 57" North and 119° 53' 00" West.

In accordance with the criteria contained in Sections 73.622(g) and 73.623, the Petitioner agrees to provide all equipment necessary for precise frequency control of Television Station KOLO-TV which would be adjacent to the channel 9 facility on Slide Mountain. The Petitioner will either provide and install all such equipment necessary at KOLO-TV or provide such equipment and pay for its installation by others to be selected by KOLO-TV.

The proposed facility would be more than five miles from the existing KRNV NTSC location although it would be at the same site as the proposed KRNV location. In any case, a complete interference study has been completed to determine if any interference would be caused to other stations by the operation of KRNV-DT on channel 9 at the proposed reference coordinates. That study was performed in accordance with the procedures outlined in "Additional Application Processing

- 4 -

Guidelines For Digital Television (DTV)" released by the Commission on August 10, 1998. The first of the attached studies was performed simply to determine if interference would be caused to any other stations by the proposed operation of KRVN-DT on channel 9. The first map demonstrates where interference would be caused. Only one station would receive interference from KRVN-DT on channel 9. That station would be KQED at San Francisco, California. The total population which would receive interference from KRVN-DT would be 34,528. The locations where that interference would be caused are shown on the interference study.

The next study determined interference to KQED from all other stations and allocations without the proposed KRVN-DT allocation change to channel 9. The population study indicated that the total interfered population would be 436,370 which represented 7.43% of the total population.

A third study was then performed which determined the interference to KQED from other stations and allocations including the KRVN-DT on channel 9. That study determined that the total percentage of the KQED service area which would receive interference was still 7.43% and that the population which would

- 5 -

receive interference increased by only 184 people. A review of the Commission's analysis of the KQED operation in San Francisco determined that the Commission calculated their interference to a total of 550,345 people which would be 9.2% of the service area not affected by terrain losses. It should be noted that the percentage value is below the 10% established by the Commission's guidelines.

When the contribution is added for new interference from KRNVT-DT on channel 9, the total increase of 184 represents only 0.003% of those not affected by terrain losses. Any other locations which would receive interference from the proposed KRNVT-DT on channel 9 already receive interference from other stations. Therefore, those populations are not included in the de minimus value of new interference. That would be limited to an increase of 0.8% based upon the fact that the 10% limit should not be exceeded. The Commission has further stated that the interference percentage is to be rounded to the nearest 0.1% which would result in an increase from new interference of 0.0% for the addition of the proposed KRNVT-DT.

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The final maps demonstrate that the city of license would receive the necessary signal from the proposed allocation. In addition, the service from the proposed KRNV-DT facility and from the allocated KRNV-DT are both shown. It is apparent that a significant increase in coverage area would occur from the proposed allocation. The population which would be served, based on the Longley-Rice method, from the allocated facility would be 306,823. The proposed KRNV-DT on channel 9 would serve, again based on the Longley-Rice method, a population of 420,619 for an increase of 37%.

It is respectfully submitted that the change from channel 34 to channel 9, with the addition of the change to the Slide Mountain site, will result in significantly improved DTV service for KRNV. This will also co-locate the DTV facility with the KRNV NTSC operation if the existing application is granted. The interference study clearly demonstrates that this change in allocation can be made without causing any prohibited interference to other stations whether NTSC or DTV. In addition, the Petitioner has agreed to reimburse for any cost involved for KOLO-TV operating on channel

- 7 -

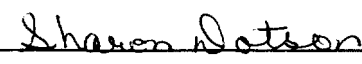
8, to install a high stability frequency standard.

The preceding statement and attached exhibits have been prepared by me or under my direction and are true and correct to the best of my knowledge and belief.



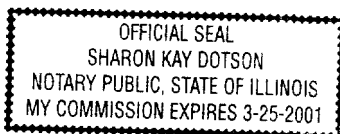
Donald L. Markley, P.E.

Subscribed and sworn to before me this 6th Day of December, 1999.



Notary Public

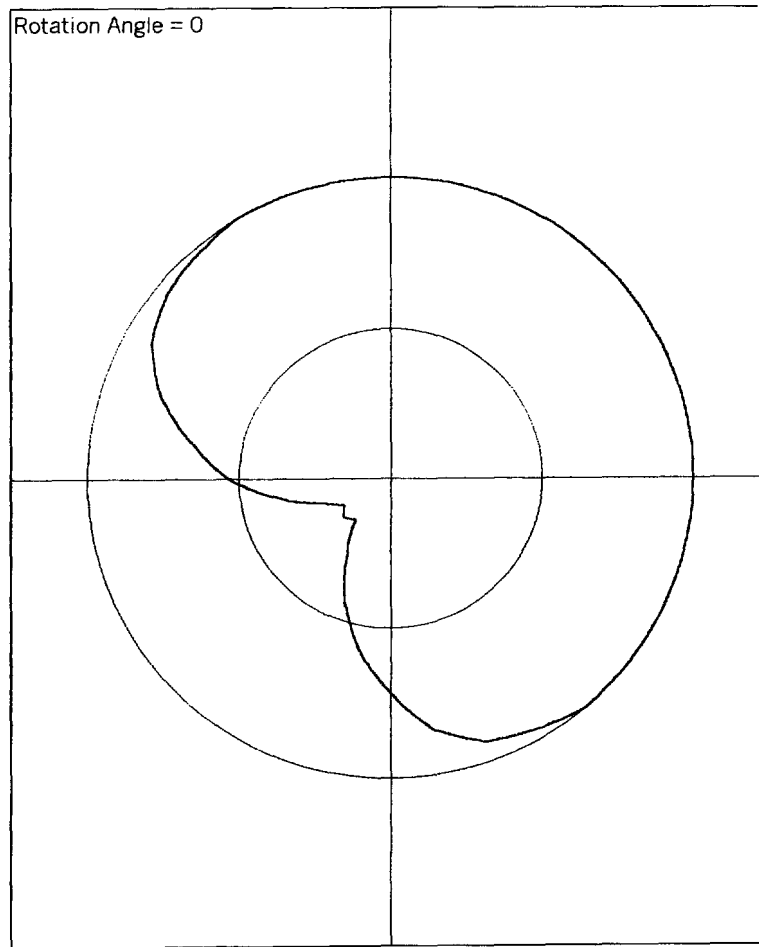
My commission expires:



Pre-Rotation Antenna Pattern....

Degrees	Effective Field
0.0	1.000
10.0	1.000
20.0	1.000
30.0	1.000
40.0	1.000
50.0	1.000
60.0	1.000
70.0	1.000
80.0	1.000
90.0	1.000
100.0	1.000
110.0	1.000
120.0	1.000
130.0	1.000
140.0	1.000
150.0	0.966
160.0	0.934
170.0	0.853
180.0	0.715
190.0	0.585
200.0	0.440
210.0	0.285
220.0	0.180
230.0	0.202
240.0	0.178
250.0	0.236
260.0	0.375
270.0	0.533
280.0	0.659
290.0	0.804
300.0	0.908
310.0	0.957
320.0	0.980
330.0	1.000
340.0	1.000
350.0	1.000







Rotation Angle = 0



Interference to other stations or allocations from proposed KRND-DT on channel 9.


Prop KRVN-DT
Latitude: 39-18-57 N
Longitude: 119-53-00 W
Power: 16.80 kW
Frequency: 189.0 MHz
Channel: 9
AMSL Height: 2983.6 m
Elevation: 2922.9 m
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 10.0 m
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast

Prop KRNV-DT
Latitude: 39-18-57 N
Longitude: 119-53-00 W
Power: 16.80 kW
Frequency: 189.0 MHz
Channel: 9
AMSL Height: 2983.6 m
Elevation: 2922.9 m
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 10.0 m
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast

	Prop KRNV-DT
	KQED
	KIXETV
	KXTV
	KOLOTV
	KFSNTV-D


D. L. Markley & Associates, Inc.
Consulting Engineers

Scale 1:1,500,000



0 20 40 60 km

Scale 1:1,500,000



0 20 40 60 km

**Interference to other stations or allocations
from proposed KRNV-DT on Channel 9**

Stations which receive interference:

Call Letters	H Units	Population	Area (sq. km)
KQED	13362	34528	316.86




Totals for Prop KRNV-DT

Total population to which interference is caused:	34528
Total number of housing units to which interference is caused:	13362

	Housing Units	Population
California		
Alameda County		
KQED	2	5
Contra Costa County		
KQED	11,832	30,517
Sacramento County		
KQED	398	724
San Joaquin County		
KQED	13	35
Solano County		
KQED	1,039	3,033
Yolo County		
KQED	78	214

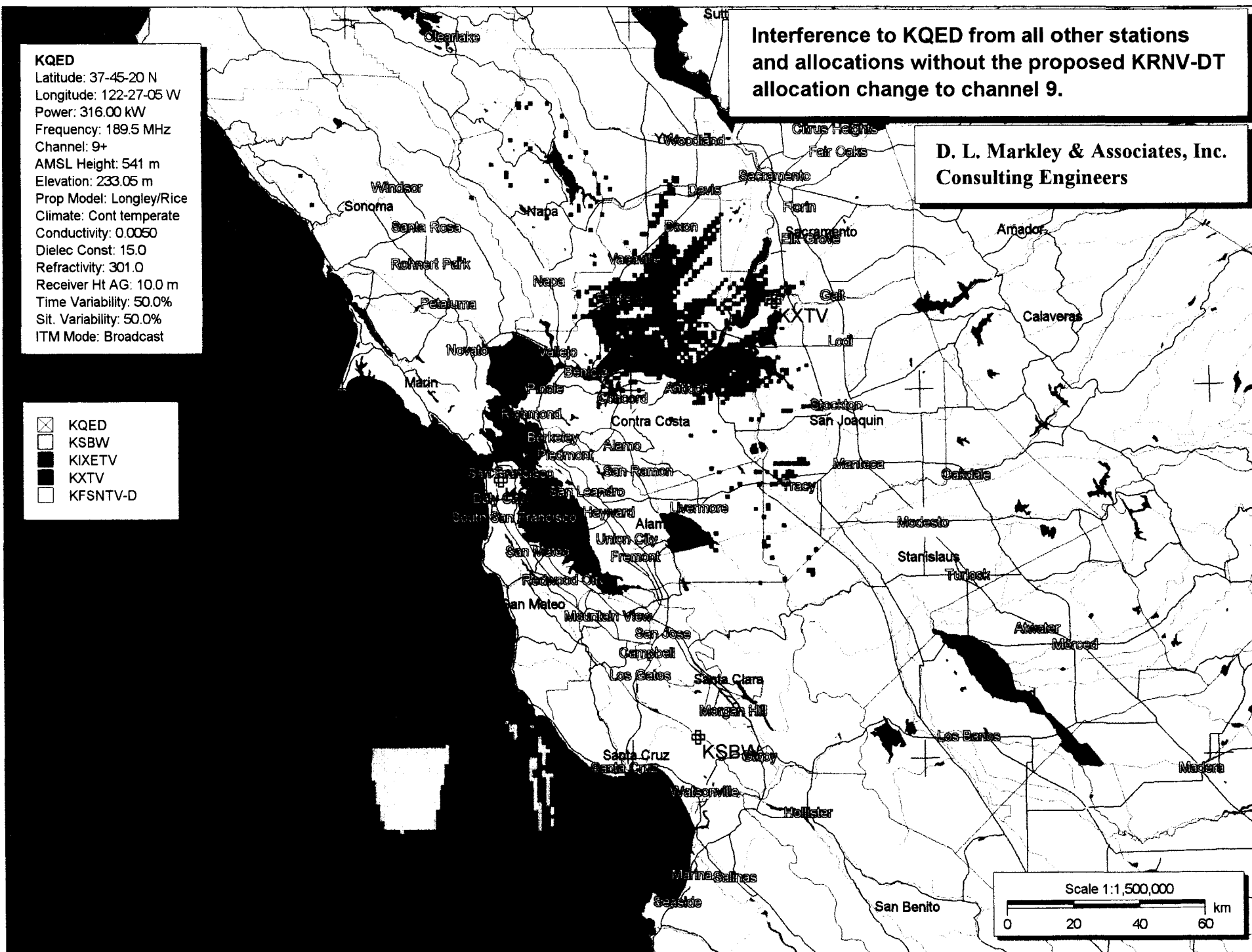
KQED

Latitude: 37-45-20 N
Longitude: 122-27-05 W
Power: 316.00 kW
Frequency: 189.5 MHz
Channel: 9+
AMSL Height: 541 m
Elevation: 233.05 m
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 10.0 m
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast

-  KQED
-  KSBW
-  KIXETV
-  KXTV
-  KFSNTV-D

Interference to KQED from all other stations
and allocations without the proposed KRNVT-DT
allocation change to channel 9.

D. L. Markley & Associates, Inc.
Consulting Engineers



**INTERFERENCE TO KQED-TV FROM ALL OTHER STATIONS AND
ALLOCATIONS WITHOUT THE PROPOSED CHANGED KRNV-DT ALLOCATION**

Stations which cause interference:

Call Letters	H Units	Population	%	Area (sq. km)
KSBW	57567	166256	2.829	865.55
KIXETV	46389	117138	1.994	1041.06
KXTV	76062	211753	3.604	1636.76
KFSNTV-D	30800	79448	1.352	580.77

Totals for KQED

Total Population: 5,875,910
Interference Free: 5,439,540
Interfered Population: 436,370
Percent Interference: 7.43

	Housing Units	Population	% of County
California			
Alameda County			
KQED	503,981	1,278,882	
KSBW	1,059	2,679	0.21
KXTV	21	60	0.00
KFSNTV-D	4	13	0.00
Contra Costa County			
KQED	278,073	697,219	
KSBW	1,565	4,637	0.67
KIXETV	38,818	94,187	13.51
KXTV	27,899	73,683	10.57
KFSNTV-D	20,243	52,758	7.57
Lake County			
KQED	353	760	
Marin County			
KQED	99,614	229,729	
Napa County			
KQED	38,188	97,750	
KIXETV	431	1,066	1.09
Sacramento County			
KQED	7,961	19,859	
KIXETV	721	1,504	7.57
KXTV	711	1,463	7.37
KFSNTV-D	145	317	1.60
San Francisco County			
KQED	328,471	723,959	
San Joaquin County			
KQED	10,080	25,481	
KIXETV	13	35	0.14
KXTV	9,323	23,324	91.53
KFSNTV-D	9,308	23,289	91.40
San Mateo County			
KQED	251,613	649,172	
KSBW	2,927	7,850	1.21
Santa Clara County			
KQED	524,298	1,446,822	

KSBW	51,361	149,378	10.32
KXTV	70	104	0.01
Santa Cruz County			
KQED	21,696	54,342	
KSBW	655	1,712	3.15
Solano County			
KQED	104,506	301,384	
KIXETV	6,306	20,076	6.66
KXTV	37,944	112,860	37.45
KFSNTV-D	1,100	3,071	1.02
Sonoma County			
KQED	124,072	305,672	
KIXETV	6	11	0.00
Stanislaus County			
KQED	27	52	
Yolo County			
KQED	16,605	44,827	
KIXETV	94	259	0.58
KXTV	94	259	0.58

**Interference to KQED from other stations and allocations
including the proposed KRNVT-DT on channel 9**

Stations which cause interference:

Call Letters	H Units	Population	%	Area (sq. km)
KSBW	57567	166256	2.829	865.55
KIXETV	46441	117322	1.997	1041.06
KXTV	76114	211937	3.607	1636.76
KFSNTV-D	30800	79448	1.352	580.77
Prop KRNVT-DT	13362	34528	0.588	318.36

Totals for KQED







Total Population: 5,876,094
Interference Free: 5,439,540
Interfered Population: 436,554
Percent Interference: 7.43

	Housing Units	Population	% of County

California			
Alameda County			
KQED	503,981	1,278,882	
KSBW	1,059	2,679	0.21
KXTV	21	60	0.00
KFSNTV-D	4	13	0.00
Prop KRNVT-DT	2	5	0.00
Contra Costa County			
KQED	278,073	697,219	
KSBW	1,565	4,637	0.67
KIXETV	38,818	94,187	13.51
KXTV	27,899	73,683	10.57
KFSNTV-D	20,243	52,758	7.57
Prop KRNVT-DT	11,832	30,517	4.38
Lake County			
KQED	353	760	
Marin County			
KQED	99,614	229,729	
Napa County			
KQED	38,188	97,750	
KIXETV	431	1,066	1.09
Sacramento County			
KQED	7,961	19,859	
KIXETV	721	1,504	7.57
KXTV	711	1,463	7.37
KFSNTV-D	145	317	1.60
Prop KRNVT-DT	398	724	3.65
San Francisco County			
KQED	328,471	723,959	
San Joaquin County			
KQED	10,080	25,481	
KIXETV	13	35	0.14
KXTV	9,323	23,324	91.53
KFSNTV-D	9,308	23,289	91.40
Prop KRNVT-DT	13	35	0.14

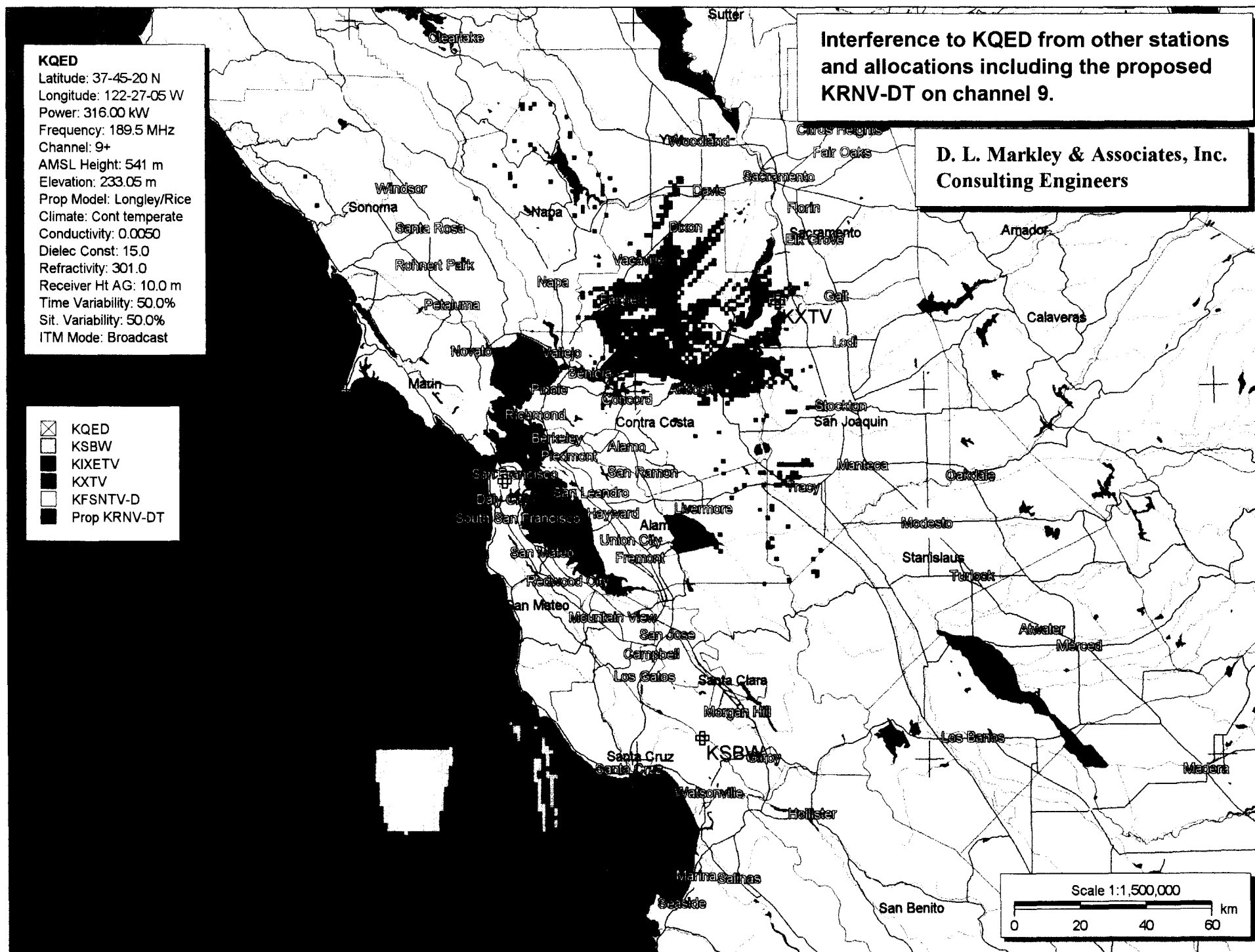
San Mateo County			
KQED	251,613	649,172	
KSBW	2,927	7,850	1.21
Santa Clara County			
KQED	524,298	1,446,822	
KSBW	51,361	149,378	10.32
KXTV	70	104	0.01
Santa Cruz County			
KQED	21,696	54,342	
KSBW	655	1,712	3.15
Solano County			
KQED	104,558	301,568	
KIXETV	6,358	20,260	6.72
KXTV	37,996	113,044	37.49
KFSNTV-D	1,100	3,071	1.02
Prop KRNV-DT	1,039	3,033	1.01
Sonoma County			
KQED	124,072	305,672	
KIXETV	6	11	0.00
Stanislaus County			
KQED	27	52	
Yolo County			
KQED	16,605	44,827	
KIXETV	94	259	0.58
KXTV	94	259	0.58
Prop KRNV-DT	78	214	0.48

Latitude: 37-45-20 N
Longitude: 122-27-05 W
Power: 316.00 kW
Frequency: 189.5 MHz
Channel: 9+
AMSL Height: 541 m
Elevation: 233.05 m
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 10.0 m
Time Variability: 50.0 %
Sit. Variability: 50.0 %
ITM Mode: Broadcast

	KQED
	KSBW
	KIXETV
	KXTV
	KFSNTV-D
	Prop KRNV-DT

Interference to KQED from other stations and allocations including the proposed KRVN-DT on channel 9.

D. L. Markley & Associates, Inc.
Consulting Engineers



Prop KRVN-DT

Latitude: 39-18-57 N
Longitude: 119-53-00 W
Power: 16.80 kW
Frequency: 189.0 MHz
Channel: 9
AMSL Height: 2983.6 m
Elevation: 2922.9 m
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 10.0 m
Time Variability: 90.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast

Proposed KRVN-DT service area calculated
by both the Longley-Rice and the FCC standard
curve methods.

□ >36.0 dBu

■ 0.0 - 36.0

Prop KRVN-DT

Carson City
Carson City

South Lake Tahoe

Douglas

D. L. Markley & Associates, Inc.
Consulting Engineers

Scale 1:1,500,000

0 20 40 60 km

Service from the allocated facilities for
KRVN-DT as calculated by both the
Longley-Rice and the FCC standard
curve methods

D. L. Markley & Associates, Inc.
Consulting Engineers

KRVN-D
Latitude: 39-35-03 N
Longitude: 119-48-06 W
Power: 1000.00 kW
Frequency: 593.0 MHz
Channel: 34
AMSL Height: 1681 m
Elevation: 1618.44 m
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 10.0 m
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast

